

Specific risk means the risk of loss on a position that could result from factors other than broad market movements and includes event risk, default risk, and idiosyncratic risk.

Structural position in a foreign currency means a position that is not a trading position and that is:

(1) Subordinated debt, equity, or minority interest in a consolidated subsidiary that is denominated in a foreign currency;

(2) Capital assigned to foreign branches that is denominated in a foreign currency;

(3) A position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the national bank's or Federal savings association's tier 1 or tier 2 capital; or

(4) A position designed to hedge a national bank's or Federal savings association's capital ratios or earnings against the effect on paragraphs (1), (2), or (3) of this definition of adverse exchange rate movements.

Term repo-style transaction means a repo-style transaction that has an original maturity in excess of one business day.

Trading position means a position that is held by the national bank or Federal savings association for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame conforming to trade custom.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more positions could decline due to market price or rate movements during a fixed holding period within a stated confidence interval.

§ 3.203 Requirements for application of this subpart F.

(a) *Trading positions*—(1) *Identification of trading positions*. A national bank or Federal savings association must have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions and which of its trading positions are correlation trading positions. These policies and procedures must take into account:

(i) The extent to which a position, or a hedge of its material risks, can be marked-to-market daily by reference to a two-way market; and

(ii) Possible impairments to the liquidity of a position or its hedge.

(2) *Trading and hedging strategies*. A national bank or Federal savings association must have clearly defined trading and hedging strategies for its trading positions that are approved by senior management of the national bank or Federal savings association.

(i) The trading strategy must articulate the expected holding period of, and the market risk associated with, each portfolio of trading positions.

(ii) The hedging strategy must articulate for each portfolio of trading positions the level of market risk the national bank or Federal savings association is willing to accept and must detail the instruments, techniques, and strategies the national bank or Federal savings association will use to hedge the risk of the portfolio.

(b) *Management of covered positions*—

(1) *Active management*. A national bank or Federal savings association must have clearly defined policies and procedures for actively managing all covered positions. At a minimum, these policies and procedures must require:

(i) Marking positions to market or to model on a daily basis;

(ii) Daily assessment of the national bank's or Federal savings association's ability to hedge position and portfolio risks, and of the extent of market liquidity;

(iii) Establishment and daily monitoring of limits on positions by a risk control unit independent of the trading business unit;

(iv) Daily monitoring by senior management of information described in

paragraphs (b)(1)(i) through (b)(1)(iii) of this section;

(v) At least annual reassessment of established limits on positions by senior management; and

(vi) At least annual assessments by qualified personnel of the quality of market inputs to the valuation process, the soundness of key assumptions, the reliability of parameter estimation in pricing models, and the stability and accuracy of model calibration under alternative market scenarios.

(2) *Valuation of covered positions.* The national bank or Federal savings association must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.

(c) *Requirements for internal models.* (1) A national bank or Federal savings association must obtain the prior written approval of the OCC before using any internal model to calculate its risk-based capital requirement under this subpart.

(2) A national bank or Federal savings association must meet all of the requirements of this section on an ongoing basis. The national bank or Federal savings association must promptly notify the OCC when:

(i) The national bank or Federal savings association plans to extend the use of a model that the OCC has approved under this subpart to an additional business line or product type;

(ii) The national bank or Federal savings association makes any change to an internal model approved by the OCC under this subpart that would result in a material change in the national bank's or Federal savings association's risk-weighted asset amount for a portfolio of covered positions; or

(iii) The national bank or Federal savings association makes any material change to its modeling assumptions.

(3) The OCC may rescind its approval of the use of any internal model (in

whole or in part) or of the determination of the approach under § 3.209(a)(2)(ii) for a national bank's or Federal savings association's modeled correlation trading positions and determine an appropriate capital requirement for the covered positions to which the model would apply, if the OCC determines that the model no longer complies with this subpart or fails to reflect accurately the risks of the national bank's or Federal savings association's covered positions.

(4) The national bank or Federal savings association must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure that they continue to meet the OCC's standards for model approval and employ risk measurement methodologies that are most appropriate for the national bank's or Federal savings association's covered positions.

(5) The national bank or Federal savings association must incorporate its internal models into its risk management process and integrate the internal models used for calculating its VaR-based measure into its daily risk management process.

(6) The level of sophistication of a national bank's or Federal savings association's internal models must be commensurate with the complexity and amount of its covered positions. A national bank's or Federal savings association's internal models may use any of the generally accepted approaches, including but not limited to variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.

(7) The national bank's or Federal savings association's internal models must properly measure all the material risks in the covered positions to which they are applied.

(8) The national bank's or Federal savings association's internal models must conservatively assess the risks arising from less liquid positions and positions with limited price transparency under realistic market scenarios.

(9) The national bank or Federal savings association must have a rigorous

and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.

(10) If a national bank or Federal savings association uses internal models to measure specific risk, the internal models must also satisfy the requirements in paragraph (b)(1) of § 3.207.

(d) *Control, oversight, and validation mechanisms.* (1) The national bank or Federal savings association must have a risk control unit that reports directly to senior management and is independent from the business trading units.

(2) The national bank or Federal savings association must validate its internal models initially and on an ongoing basis. The national bank's or Federal savings association's validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;

(ii) An ongoing monitoring process that includes verification of processes and the comparison of the national bank's or Federal savings association's model outputs with relevant internal and external data sources or estimation techniques; and

(iii) An outcomes analysis process that includes backtesting. For internal models used to calculate the VaR-based measure, this process must include a comparison of the changes in the national bank's or Federal savings association's portfolio value that would have occurred were end-of-day positions to remain unchanged (therefore, excluding fees, commissions, reserves, net interest income, and intraday trading) with VaR-based measures during a sample period not used in model development.

(3) The national bank or Federal savings association must stress test the market risk of its covered positions at a frequency appropriate to each portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk

(including but not limited to concentrations in single issuers, industries, sectors, or markets), illiquidity under stressed market conditions, and risks arising from the national bank's or Federal savings association's trading activities that may not be adequately captured in its internal models.

(4) The national bank or Federal savings association must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the national bank's or Federal savings association's market risk measurement systems, including the activities of the business trading units and independent risk control unit, compliance with policies and procedures, and calculation of the national bank's or Federal savings association's measures for market risk under this subpart. At least annually, the internal audit function must report its findings to the national bank's or Federal savings association's board of directors (or a committee thereof).

(e) *Internal assessment of capital adequacy.* The national bank or Federal savings association must have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account risks that may not be captured fully in the VaR-based measure, including concentration and liquidity risk under stressed market conditions.

(f) *Documentation.* The national bank or Federal savings association must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, validation and review processes and results, and internal assessment of capital adequacy.

§ 3.204 Measure for market risk.

(a) *General requirement.* (1) A national bank or Federal savings association must calculate its standardized measure for market risk by following the steps described in paragraph (a)(2) of this section. An advanced approaches